

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/677,703 10/02/2003 Tuan Vo-Dinh 6321-241 9197 EXAMINER 10/03/2005 7590 Gregory A. Nelson JUNG, WILLIAM C Suite 400 ART UNIT PAPER NUMBER 222 Lakeview Avenue West Palm Beach, FL 33401 3737

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	_	. /	٦
•	1	Y	ı
	Λ	ĸ	
- 1	•	U	

	Application No.	Applicant(s)			
Office Action Comments	10/677,703	VO-DINH, TUAN			
Office Action Summary	Examiner	Art Unit			
	William Jung	3737			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 02 Oc	1) Responsive to communication(s) filed on <u>02 October 2003</u> .				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 1-26 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-26</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P	ate atent Application (PTO-152)			
Paper No(s)/Mail Date <u>10012005</u> .	6) Other:	, ,			

Application/Control Number: 10/677,703

Art Unit: 3737

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-4, 11-13, 15, 21, 22, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by *Clarke* (US 6,208,887 B1).

Clarke anticipates all claimed features in claims 1-26.

Claims 1, 15, and 26: Clarke discloses a method and system of diagnosis using excitation radiation through a single optical waveguide or a single optical wavelength bundle where a region of interest or target tissue of the excitation radiation emits emission radiation in response, receiving the emission radiation with co-registration of the excitation and emission radiations and synchronously scanning a wavelength of excitation emission radiations to obtain a spectrum (column 2, lines 27-63; column 6, lines 35-55; column 8, lines 10-32).

Claims 2-4: Clarke further discloses that the spectrum or spectroscopical analysis involves distinguishing diseased state from healthy state (e.g. determining artherosclerotic plaque along a blood vessel by determining calcified, fibrous, or normal) by comparative means (column 7, lines 8-34).

Claims 11-13, 21, and 22: Clarke discloses that the excitation radiation causes scattering in emission radiation therefore, optical filter is essential to rid of unwanted radiation (column 4, lines 61-67).

Application/Control Number: 10/677,703 Page 3

Art Unit: 3737

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 5-10, 14, 16-20, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Clarke* as applied to claims 1 and 15 above, and further in view of *Boppart et al* (US 6,485,413 B1).

Clarke substantially discloses all claimed features in claims 5-10, 14, 16-20, and 23-25 as described above.

Claims 5, 23, and 25: However, Clarke is silent as to providing images from the spectroscopical data. This particular method is well known in to art as evident by Boppart et al where spectral data is converted to images (column 4, lines 39-64). Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to apply the teachings of Boppart et al's image data conversion from spectral data from Clarke to achieve the claimed invention.

Claims 6-9 and 16-20: In addition, Boppart et al further disclose back end processing where the radiation's intensity is modulates and the time resolved spectroscopy or phase correction is achieved (column 5, lines 3-25; column 7, line 63 - column 8, line 18).

Claims 10 and 14: Furthermore, Boppart et al's invention deals with optical computed tomography (OCT), which inherently includes radiation excitation and receive emission radiation with set time interval.

Claim 24: Both Clarke and Boppart et al uses intensified or amplified CCD as a detector.

Application/Control Number: 10/677,703 Page 4

Art Unit: 3737

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Jung, Ph.D. whose telephone number is 571-272-4739. The examiner can normally be reached on Mon-Fri 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4003

September 19, 2005

ALI IMAM
PRIMARY EXAMINER